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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/347,891	07/06/1999	KWANG-HO JUNG	YOO-PN0321	4491

26418 7590 05/06/2002

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EXAMINER

LE, LANA N

ART UNIT

PAPER NUMBER

2684

DATE MAILED: 05/06/2002

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/347,891

Applicant(s)

JUNG ET AL.

Examiner

Lana Le

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 January 2002.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☒ Claim(s) 3, 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Objections

Claim 4 is objected to because of the following informalities: Claim 4 is objected to due to a repetition of words "number;" on page 3 line 1 following page 2. Appropriate correction is required.

Response to Arguments

Applicant's arguments filed 1/15/2002 have been fully considered but they are not persuasive. The private network service can be implemented in the private wireless office system which appears as a private node. The private corporate group of Widergen does not only consist of fixed extension but also corporate mobile terminals, CMTs, in the private wireless office system that are registered in the SCP. When a CMT of the corporate group in the wireless office system calls an extension number of another CMT of the corporate group in the private wireless office, the call is routed as a virtual wireless call.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Widergen (US 5,890,064).

Regarding claim 1, Widergen discloses a method for constructing a WVPN (Wireless Virtual Private Network) for a CDMA system which includes a mobile telephone 122 serviced by a private network group PTN 108, a BTS (Base Transceiver System) in 114 for transmitting and receiving a message with the mobile telephone, a BSC (Base Station Controller) in 114 for managing the BTS, a MSC 112 (Mobile Switching Center) including a MSA (Mobile Signaling access), a MCC (Mobile Call Control) inherently therein, and a VLR (Visitor Location Register) (col 4, lines 67), a HLR (Home Location Register) 110, a SCP (Services Control Point) 110 for storing an extension number with respect to a calling subscriber serviced by a private network group, a method for constructing a WVPN for a CDMA system comprising the steps of:

a first step for registering a private corporate group and short (extension) number to the SCP database 110 (col 4, lines 44-57); and judging whether a call by a certain calling subscriber's terminal CMT corresponds to a PN (personal short extension number) or a regular mobile directory number when a certain calling subscriber 120 calls a certain receiving subscriber 122 of the same corporate group as the calling subscriber in the private wireless office system 142 (col 4, lines 44-60);

a second step for constructing a WVPN (in which the WO Gateway 124 in the private wireless office 142 emulate a PBX/PTN node) in the case that the call by the

calling subscriber 120 corresponds to the private extension number PN (col 5, lines 60-66; col 7, lines 55- col 8, line 20).

Widergen didn't disclose a second step for constructing a mobile communications network using the MDN in the case that as a result of the first step the call by the calling subscriber corresponds to the MDN. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to dial a mobile directory number of another mobile subscriber that may not be assigned to the private corporate group numbering plan (col 4, lines 44-50) in order to make normal wireless calls from one mobile terminal to another mobile terminal.

Regarding claim 2, Widergen et al discloses the method of claim 1 wherein the second step includes: a first sub-step for requesting a telephone of the calling subscriber to the HLR/SCP 110, transmitting a telephone number and extension number to the SCP with respect to the calling subscriber (col 6, lines 23-33), requesting a PN information of the receiving subscriber (col 5, lines 60-65), and judging whether there is a corporate group of the telephone number of the calling subscriber (col 5, lines 65-67); a second sub-step for judging whether the extension number transmitted to the SCP exists in the corporate group of the calling subscriber in the case that when there is the group of the telephone number of the calling subscriber as a result of the judgement of the first sub-step (col 8, lines 1-20); and a third sub-step for constructing the WVPN by transmitting the MDN corresponding to the receiving extension number to the MSC in the case that the extension number exists in the group of the calling

subscriber as a result of the judgement of the second sub-step (col 8, lines 1-20; col 6, lines 30-33).

Allowable Subject Matter

2. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
3. Claim 4 is allowable due since it is rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. Any response to this action should be mailed to:
Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for formal communications intended for entry)

or:

(for informal or draft communications, please label

Art Unit: 2684

"PROPOSED" or "DRAFT"

Hand-delivered responses should be brought to the Crystal Park II, 2021 Crystal Drive,
Arlington VA, Sixth Floor (Receptionist).

Any inquiry concerning this communication or communications from the examiner should be directed to Lana Le whose telephone number is (703) 308-5836 or to the supervisory patent examiner Daniel Hunter whose telephone number is (703) 308-6732.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Lana Le

April 3, 2002


THANH CONG LE
PRIMARY EXAMINER
4/15/02
TC2600